

PCT10

RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/009,332

DATE: 01/14/2002

TIME: 12:00:35

Input Set : A:\Q67541 Sequence Listing.txt

Output Set: N:\CRF3\01142002\J009332.raw

ENTERED

3 <110> APPLICANT: Yamanouchi Pharmaceutical Co., Ltd.
 4 Kazusa DNA Research Institute
 6 <120> TITLE OF INVENTION: NOVEL METALLOPROTEASE HAVING AGGREGANASE ACTIVITY
 8 <130> FILE REFERENCE: Q67541
 C--> 10 <140> CURRENT APPLICATION NUMBER: US/10/009,332
 C--> 10 <141> CURRENT FILING DATE: 2001-12-10
 10 <150> PRIOR APPLICATION NUMBER: JPA Hei 11-321740
 11 <151> PRIOR FILING DATE: 1999-11-11
 13 <150> PRIOR APPLICATION NUMBER: JPA 2000-144020
 14 <151> PRIOR FILING DATE: 2000-05-16
 16 <160> NUMBER OF SEQ ID NOS: 35
 18 <170> SOFTWARE: PatentIn version 3.1
 20 <210> SEQ ID NO: 1
 21 <211> LENGTH: 950
 22 <212> TYPE: PRT
 23 <213> ORGANISM: Homo sapiens
 25 <400> SEQUENCE: 1
 27 Met Leu Leu Leu Gly Ile Leu Thr Leu Ala Phe Ala Gly Arg Thr Ala
 28 1 5 10 15
 31 Gly Gly Phe Glu Pro Glu Arg Glu Val Val Val Pro Ile Arg Leu Asp
 32 20 25 30
 35 Pro Asp Ile Asn Gly Arg Arg Tyr Trp Arg Gly Pro Glu Asp Ser
 36 35 40 45
 39 Gly Asp Gln Gly Leu Ile Phe Gln Ile Thr Ala Phe Gln Glu Asp Phe
 40 50 55 60
 43 Tyr Leu His Leu Thr Pro Asp Ala Gln Phe Leu Ala Pro Ala Phe Ser
 44 65 70 75 80
 47 Thr Glu His Leu Gly Val Pro Leu Gln Gly Leu Thr Gly Gly Ser Ser
 48 85 90 95
 51 Asp Leu Arg Arg Cys Phe Tyr Ser Gly Asp Val Asn Ala Glu Pro Asp
 52 100 105 110
 55 Ser Phe Ala Ala Val Ser Leu Cys Gly Gly Leu Arg Gly Ala Phe Gly
 56 115 120 125
 59 Tyr Arg Gly Ala Glu Tyr Val Ile Ser Pro Leu Pro Asn Ala Ser Ala
 60 130 135 140
 63 Pro Ala Ala Gln Arg Asn Ser Gln Gly Ala His Leu Leu Gln Arg Arg
 64 145 150 155 160
 67 Gly Val Pro Gly Gly Pro Ser Gly Asp Pro Thr Ser Arg Cys Gly Val
 68 165 170 175
 71 Ala Ser Gly Trp Asn Pro Ala Ile Leu Arg Ala Leu Asp Pro Tyr Lys
 72 180 185 190
 75 Pro Arg Arg Ala Gly Phe Gly Glu Ser Arg Ser Arg Arg Arg Ser Gly
 76 195 200 205
 79 Arg Ala Lys Arg Phe Val Ser Ile Pro Arg Tyr Val Glu Thr Leu Val
 80 210 215 220
 83 Val Ala Asp Glu Ser Met Val Lys Phe His Gly Ala Asp Leu Glu His
 84 225 230 235 240

RAW SEQUENCE LISTING

DATE: 01/14/2002

PATENT APPLICATION: US/10/009,332

TIME: 12:00:35

Input Set : A:\Q67541 Sequence Listing.txt

Output Set: N:\CRF3\01142002\J009332.raw

```

87 Tyr Leu Leu Thr Leu Leu Ala Thr Ala Ala Arg Leu Tyr Arg His Pro
88                               245                               250                               255
91 Ser Ile Leu Asn Pro Ile Asn Ile Val Val Val Lys Val Leu Leu Leu
92                               260                               265                               270
95 Arg Asp Arg Asp Ser Gly Pro Lys Val Thr Gly Asn Ala Ala Leu Thr
96                               275                               280                               285
99 Leu Arg Asn Phe Cys Ala Trp Gln Lys Lys Leu Asn Lys Val Ser Asp
100                              290                              295                              300
103 Lys His Pro Glu Tyr Trp Asp Thr Ala Ile Leu Phe Thr Arg Gln Asp
104 305                              310                              315                              320
107 Leu Cys Gly Ala Thr Thr Cys Asp Thr Leu Gly Met Ala Asp Val Gly
108                              325                              330                              335
111 Thr Met Cys Asp Pro Lys Arg Ser Cys Ser Val Ile Glu Asp Asp Gly
112                              340                              345                              350
115 Leu Pro Ser Ala Phe Thr Thr Ala His Glu Leu Gly His Val Phe Asn
116                              355                              360                              365
119 Met Pro His Asp Asn Val Lys Val Cys Glu Glu Val Phe Gly Lys Leu
120                              370                              375                              380
123 Arg Ala Asn His Met Met Ser Pro Thr Leu Ile Gln Ile Asp Arg Ala
124 385                              390                              395                              400
127 Asn Pro Trp Ser Ala Cys Ser Ala Ala Ile Thr Asp Phe Leu Asp
128                              405                              410                              415
131 Ser Gly His Gly Asp Cys Leu Leu Asp Gln Pro Ser Lys Pro Ile Ser
132                              420                              425                              430
135 Leu Pro Glu Asp Leu Pro Gly Ala Ser Tyr Thr Leu Ser Gln Gln Cys
136                              435                              440                              445
139 Glu Leu Ala Phe Gly Val Gly Ser Lys Pro Cys Pro Tyr Met Gln Tyr
140                              450                              455                              460
143 Cys Thr Lys Leu Trp Cys Thr Gly Lys Ala Lys Gly Gln Met Val Cys
144 465                              470                              475                              480
147 Gln Thr Arg His Phe Pro Trp Ala Asp Gly Thr Ser Cys Gly Glu Gly
148                              485                              490                              495
151 Lys Leu Cys Leu Lys Gly Ala Cys Val Glu Arg His Asn Leu Asn Lys
152                              500                              505                              510
155 His Arg Val Asp Gly Ser Trp Ala Lys Trp Asp Pro Tyr Gly Pro Cys
156                              515                              520                              525
159 Ser Arg Thr Cys Gly Gly Gly Val Gln Leu Ala Arg Arg Gln Cys Thr
160                              530                              535                              540
163 Asn Pro Thr Pro Ala Asn Gly Gly Lys Tyr Cys Glu Gly Val Arg Val
164 545                              550                              555                              560
167 Lys Tyr Arg Ser Cys Asn Leu Glu Pro Cys Pro Ser Ser Ala Ser Gly
168                              565                              570                              575
171 Lys Ser Phe Arg Glu Glu Gln Cys Glu Ala Phe Asn Gly Tyr Asn His
172                              580                              585                              590
175 Ser Thr Asn Arg Leu Thr Leu Ala Val Ala Trp Val Pro Lys Tyr Ser
176                              595                              600                              605
179 Gly Val Ser Pro Arg Asp Lys Cys Lys Leu Ile Cys Arg Ala Asn Gly
180                              610                              615                              620
183 Thr Gly Tyr Phe Tyr Val Leu Ala Pro Lys Val Val Asp Gly Thr Leu

```

RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/009,332

DATE: 01/14/2002

TIME: 12:00:35

Input Set : A:\Q67541 Sequence Listing.txt

Output Set: N:\CRF3\01142002\J009332.raw

184	625		630		635		640
187	Cys Ser Pro Asp Ser Thr Ser Val Cys Val Gln Gly Lys Cys Ile Lys						
188		645		650		655	
191	Ala Gly Cys Asp Gly Asn Leu Gly Ser Lys Lys Arg Phe Asp Lys Cys						
192		660		665		670	
195	Gly Val Cys Gly Gly Asp Asn Lys Ser Cys Lys Lys Val Thr Gly Leu						
196		675		680		685	
199	Phe Thr Lys Pro Met His Gly Tyr Asn Phe Val Val Ala Ile Pro Ala						
200		690		695		700	
203	Gly Ala Ser Ser Ile Asp Ile Arg Gln Arg Gly Tyr Lys Gly Leu Ile						
204	705		710		715		720
207	Gly Asp Asp Asn Tyr Leu Ala Leu Lys Asn Ser Gln Gly Lys Tyr Leu						
208		725		730		735	
211	Leu Asn Gly His Phe Val Val Ser Ala Val Glu Arg Asp Leu Val Val						
212		740		745		750	
215	Lys Gly Ser Leu Leu Arg Tyr Ser Gly Thr Gly Thr Ala Val Glu Ser						
216		755		760		765	
219	Leu Gln Ala Ser Arg Pro Ile Leu Glu Pro Leu Thr Val Glu Val Leu						
220		770		775		780	
223	Ser Val Gly Lys Met Thr Pro Pro Arg Val Arg Tyr Ser Phe Tyr Leu						
224	785		790		795		800
227	Pro Lys Glu Pro Arg Glu Asp Lys Ser Ser His Pro Lys Asp Pro Arg						
228		805		810		815	
231	Gly Pro Ser Val Leu His Asn Ser Val Leu Ser Leu Ser Asn Gln Val						
232		820		825		830	
235	Glu Gln Pro Asp Asp Arg Pro Pro Ala Arg Trp Val Ala Gly Ser Trp						
236		835		840		845	
239	Gly Pro Cys Ser Ala Ser Cys Gly Ser Gly Leu Gln Lys Arg Ala Val						
240		850		855		860	
243	Asp Cys Arg Gly Ser Ala Gly Gln Arg Thr Val Pro Ala Cys Asp Ala						
244	865		870		875		880
247	Ala His Arg Pro Val Glu Thr Gln Ala Cys Gly Glu Pro Cys Pro Thr						
248		885		890		895	
251	Trp Glu Leu Ser Ala Trp Ser Pro Cys Ser Lys Ser Cys Gly Arg Gly						
252		900		905		910	
255	Phe Gln Arg Arg Ser Leu Lys Cys Val Gly His Gly Gly Arg Leu Leu						
256		915		920		925	
259	Ala Arg Asp Gln Cys Asn Leu His Arg Lys Pro Gln Glu Leu Asp Phe						
260		930		935		940	
263	Cys Val Leu Arg Pro Cys						
264	945		950				
267	<210> SEQ ID NO: 2						
268	<211> LENGTH: 2853						
269	<212> TYPE: DNA						
270	<213> ORGANISM: Homo sapiens						
272	<400> SEQUENCE: 2						
273	atgcttttgc tgggcatcct aaccctggct ttgcgccggc gaaccgctgg aggcctttgag					60	
275	ccagagcggg aggtagtctg tcccatccga ctggaccctg acattaacgg ccgccgtac					120	
277	tactggcggg gtcccaggga ctccggggat cagggaactca ttttcagat cacagcattt					180	

RAW SEQUENCE LISTING
PATENT APPLICATION: US/10/009,332

DATE: 01/14/2002
TIME: 12:00:35

Input Set : A:\Q67541 Sequence Listing.txt

Output Set : N:\CRF3\01142002\J009332.raw

```

279 caggaggacct ttacctacac cctgacgcgc gatgctcagt tcttggtctc cgcctctctc 240
281 actgacgacgt tgggcgtccc cctccaggcg ctacccgggg gctcttcaga cctgcgcagc 300
283 tgcctctatt ctggggagct gaacgcgcga cggagactgt tcgctcgtgt gagctctgtc 360
285 ggggggctcc ggggagcctt tggctaccga ggcgcgcagt atgtcattag cccgctgccc 420
287 aatgctagcg cgcgcggcgc gacgcgcaac agccaggggc cacacctctt ccagcgcgcg 480
289 ggtgttcgcg gcgggccttc cggagacccc acctctcgct gcggggtggc ctccggcttg 540
291 aaccccgcca tctacgggct cctggaccct tacaagccgc ggcggcgggg ctccggggag 600
293 agtcgtagcc ggcgcaggtc tgggcgcgcg aagcgtttcg tgtctatccc gcggtacgtg 660
295 gagacgctgg tggtcgcgga cgagctcaat gtcaagtctc acgcgcgagg cctggaacct 720
297 tatctgtgga cgtcgtcgcc aacggcgcgcg cgactctacc gccatccagg catctcaac 780
299 cccatcaaca tcgttgttgt caaggtgctg ctctcttagag atcgtgactc cgggcccaag 840
301 gtccacggca atctgggcctt gacgtctgcg aactctgtgt cctggtcaga gaactgaa 900
303 aaagtgtagt acaagcaccc cgagtactgg gacactgcca tctcttcac caggcaggac 960
305 ctgtgtggag ccaccacactg tgacaccctg ggcattggct atgtgggtac catgtgtgac 1020
307 cccaagagaa gctgctctgt cattgaggag gatgggcttc catcagcctt caccactgcc 1080
309 cagcagtgag gccacgtgtt caacatgccc catgacaatt tgaagtctg tgaggaggtg 1140
311 ttgtgggaag tcgcagccaa ccacatgatg tcocccagctt tcatccagct caccgtctgc 1200
313 aacccctgtg cagcctgcag tgcctgccat atcaccgact tctcgacag cgggcacggt 1260
315 gactgcctcc tggaccaaac cagcaagccc atctccctgc cggaggatct gccggcgccc 1320
317 agctacaccc tgagccagca gtgcgagctg gcttttgctg tgggctccaa gccctgtctt 1380
319 tacatgcagt actgcaccaa gctgtggtgc accgggaagg ccaagggaca gatgtgtg 1440
321 cagacccgctt actctccctg ggcgatggc accagctgtg gcgagggcaa gctctgctc 1500
323 aaagggcctt cgtgtgagag acacaaacct acaagacaa ggggtgagtg ttctggggcc 1560
325 aaatgggata cctatggccc ctgctcgctc acatgtgtg ggggctgca gctggccagg 1620
327 aggcagtgca ccaacccccc ccttgccaa cggggcaagt actcgcagg agtgagggtg 1680
329 aaatccgat cctgcaacct ggagccctgc cccagctcag cctccggaaa gagcttccg 1740
331 gaggagcagt gtgaggtctt caacggctac aaccacagca ccaaccgctt cactctcgcc 1800
333 gtggcatggg tgcaccaagta ctccgcgtg tctcccggg acaagtgcga gctcatctgc 1860
335 cgagccaatg gcactggcta ctctatgtg ctggcaacca aggtgtgtga cggcacgctg 1920
337 tgcctcctg actccacctc cgtctgtgtc caaggcaagt gcatcaaggc tggctgtgat 1980
339 gggaacctgg gctccaagaa gagattcgac aagtgtgggg tgtgtggggg agacaataag 2040
341 agctgcaaga aggtgactgg actctcacc atgcccctgc atggctacaa ttctgtgtg 2100
343 gccatccccc caggcgctcc aagcatcgac agcgctcag cgggttacaa agggctgac 2160
345 ggggatgaca actactctgc tctgaagaac agccaaggca agtacctgtt caacgggcat 2220
347 ttcgtgtgtg cggcgctggc ggcggacctg gtgtgaaagg cgagctgtct cgggtacag 2280
349 ggcacgggca cagcgtgga gagcctgcag gcttccggc ccatctctga gcgctgacc 2340
351 gtggaggttc tctcgtggg gaagatgaca cgcgccggcg tccgtctact ctctctactc 2400
353 cccaagagag ctccggagga caagtctct catcccaagg acccccggg accctctgtc 2460
355 tgcacaaca cgtctctcag cctctccaa cagctggaag agccggagca caggccctct 2520
357 gcaagctggg tggctggaag ctggggcgct tggctcgaga gctctcgag tggctgcag 2580
359 aagacggcgg tggactgcgc gggctccgc gggcagcga cggctccctg ctgtgatga 2640
361 gccatccgct cgtggagac acaagcctgc ggggagcctt gccccactg ggaactcag 2700
363 gctgtgtcac cctgctcaa gagctgcgc cggggatttc agaggcgctt actcaagtgt 2760
365 gtggccacg gaggccgct cgtggccgg gaccagtga acttgcaac caagcccaag 2820
367 gactgtgact tctgcgtctt gaggccgtgc tga 2853
370 <210> SEQ ID NO: 3
371 <211> LENGTH: 50
372 <212> TYPE: DNA
373 <213> ORGANISM: Homo sapiens

```

RAW SEQUENCE LISTING

PATENT APPLICATION: US/10/009,332

DATE: 01/14/2002

TIME: 12:00:35

Input Set : A:\Q67541 Sequence Listing.txt

Output Set: N:\CRF3\01142002\J009332.raw

```

375 <400> SEQUENCE: 3
376 ctagcgcggc cgcaggatcc gactacaagg acgacgatga caaatgataa      50
379 <210> SEQ ID NO: 4
380 <211> LENGTH: 50
381 <212> TYPE: DNA
382 <213> ORGANISM: Homo sapiens
384 <400> SEQUENCE: 4
385 gatcttatca ttgtcatcg tcgtccttgt agtcgggatcc tgcggcgcg      50
388 <210> SEQ ID NO: 5
389 <211> LENGTH: 34
390 <212> TYPE: DNA
391 <213> ORGANISM: Homo sapiens
393 <400> SEQUENCE: 5
394 ggactagtct agaagctggg taccagctgc tagc      34
397 <210> SEQ ID NO: 6
398 <211> LENGTH: 29
399 <212> TYPE: DNA
400 <213> ORGANISM: Homo sapiens
402 <400> SEQUENCE: 6
403 ggactagtgt cgaccggtca tggctgcgc      29
406 <210> SEQ ID NO: 7
407 <211> LENGTH: 42
408 <212> TYPE: DNA
409 <213> ORGANISM: Homo sapiens
411 <400> SEQUENCE: 7
412 gtgtctagag ccatgctttt gctgggcatc ctaaccctgg ct      42
415 <210> SEQ ID NO: 8
416 <211> LENGTH: 41
417 <212> TYPE: DNA
418 <213> ORGANISM: Homo sapiens
420 <400> SEQUENCE: 8
421 agagcggcgc cctgctctc ccggaagctc tttccggagg c      41
424 <210> SEQ ID NO: 9
425 <211> LENGTH: 27
426 <212> TYPE: DNA
427 <213> ORGANISM: Homo sapiens
429 <400> SEQUENCE: 9
430 aagcacaggg tggatggttc ctgggcc      27
433 <210> SEQ ID NO: 10
434 <211> LENGTH: 37
435 <212> TYPE: DNA
436 <213> ORGANISM: Homo sapiens
438 <400> SEQUENCE: 10
439 ggcggcgccg gcacggcctc aggacgcaga agtccag      37
442 <210> SEQ ID NO: 11
443 <211> LENGTH: 37
444 <212> TYPE: DNA
445 <213> ORGANISM: Homo sapiens
447 <400> SEQUENCE: 11

```

VERIFICATION SUMMARY

PATENT APPLICATION: US/10/009,332

DATE: 01/14/2002

TIME: 12:00:36

Input Set : A:\Q67541 Sequence Listing.txt

Output Set: N:\CRF3\01142002\J009332.raw

L:10 M:270 C: Current Application Number differs, Replaced Current Application No
L:10 M:271 C: Current Filing Date differs, Replaced Current Filing Date